CLAIMS

I claim:

1. A hydraulic control system for a construction vehicle, particularly for the control of hydraulic loads of an excavator, having at least one main control block forming several sections with spool valves located therein, a hydraulic fluid tank and two pump ducts to which pressure may be applied by means of a first pump and a second pump for the supply of hydraulic fluid to the hydraulic loads in series through the spool valves, wherein two additional pump ducts are provided, which do not pass through the spool valves, parallel to the pump ducts, and which are designed to ensure an additional parallel supply to the hydraulic loads by means of the spool valves.

2. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein one of the pump ducts and one of the additional pump ducts are designed so that pressure can be applied to them by the first pump and the other of the pump ducts and the other of the additional pump ducts are designed so that pressure can be applied to them by the second pump.

3. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein each section has a first bypass duct and a second bypass duct, the first bypass duct connecting the pump ducts with the respective spool valve and the second bypass duct connecting the additional pump ducts with the respective spool valve.

4. A hydraulic control system for a construction vehicle in accordance with claim 3, wherein the first bypass duct and the second bypass duct are linked together hydraulically and form a ring bypass.

5. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein the main control block is designed to be extendable in the direction of its longitudinal extension by means of options blocks to expand the function of the hydraulic control system, whereby said options blocks are designed so that they are hydraulically

linked to the pump ducts and to the additional pump ducts, and so that the options blocks have the same duct structure as the main control block.

6. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein the main control block has a terminating element at at least one end, in which one of the pump ducts and one of the additional pump ducts are hydraulically connected to each other.

7. A hydraulic control system for a construction vehicle in accordance with claim 6, wherein the terminating element has a controllable summing valve which is connected to the pump ducts and, if necessary, feeds the volumetric currents of the hydraulic fluid flowing through the additional pump ducts to a single hydraulic load.

8. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein the main control block has a controllable hammer valve with a main stage and a pilot stage and a pilot pressure tapping aperture, rendering internal system pilot pressure tapping possible by means of the pilot pressure tapping aperture for the pilot stage, by means of which pilot pressure the main stage is opened and closed.

9. A hydraulic control system for a construction vehicle in accordance with claim 3 wherein the section in the vicinity of the second bypass duct has a one-way restrictor and a blind plug, whereby the one-way restrictor supplies the spool valve with hydraulic fluid by means of the volumetric current provided through pump duct and the blind plug closes a connection between the pump duct and the spool valve hydraulically.

10. A hydraulic control system for a construction vehicle in accordance with claim 5, wherein the options block has a controllable pressure compensator which connects one of the additional pump ducts and the second bypass with each other, the pressure compensator being designed to supply an additional hydraulic load with a desired volumetric current of hydraulic fluid at a desired pressure, independently of the load.

11. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein the sections have a one-way restrictor.

12. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein the sections have a blind plug.

13. A hydraulic control system for a construction vehicle in accordance with claim 1, wherein the sections have a pressure compensator.